



4.0

Hazardous substance information

IN THIS SECTION:

- 4.1 Label all hazardous substances
- 4.2 Symbols on labels and signs
- 4.3 Safety data sheets
- 4.4 Signage

Labels, safety data sheets and signs are all sources of information to warn people about the risks of the hazardous substances at your workplace.

4.1 Label all hazardous substances

Manufacturers and suppliers must correctly label the products they sell you, but you must make sure that the label stays on the container and can be read.

Your workers must always read the label before using a hazardous substance so they know what they are dealing with.

Labelling decanted or transferred substances

It is always best to keep substances in their original containers. However, if you decant or transfer a hazardous substance from one container to another for ease of use or storage, make sure the receiving container is suitable for the substance and labelled.

It is never safe to have hazardous substances in unlabelled containers because people may not take the necessary safety precautions.

NEVER put hazardous substances in food or drink containers because people may eat or drink the content by mistake.

If you decant or transfer substances from their original container into smaller containers for use at the workplace, or mix substances in process containers at the workplace for your own use, the label needs to state the product or chemical name and include a hazard pictogram and hazard statement reflecting the substance's classification.

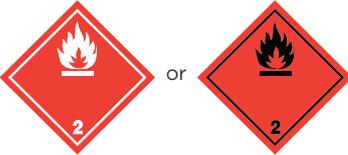
Hazardous waste

Waste that can be classified as hazardous also needs to be labelled to reflect its nature as closely as possible (for example, chlorinated solvent waste), with a hazard pictogram based on its known or likely constituents, and the name, address and phone number of its producer.

4.2 Symbols on labels and signs

The symbols, also known as pictograms, that you will see on containers and signs are shown in the table on the following pages. You will see GHS symbols on labels and workplace hazard warnings and Transport of Dangerous Goods symbols on containers used for transporting hazardous substances.

Physical hazards

TYPE OF HAZARD	GHS SYMBOL	TRANSPORT OF DANGEROUS GOODS SYMBOLS
Explosives	Explosives are not dealt with by this guide. For more information on explosives, see WorkSafe's website.	
Flammables These symbols are for products that ignite easily and burn rapidly. Keep products with these symbols well away from oxidising products.		Flammable gases 

TYPE OF HAZARD	GHS SYMBOL	TRANSPORT OF DANGEROUS GOODS SYMBOLS
		Flammable liquids  or 
		Flammable solids  Spontaneously combustible  Dangerous when wet  or 
Oxidisers These symbols are for products with oxidising properties. The products could be gas, solid or liquid and can cause or intensify fire and explosion. Keep products with these symbols well away from flammable products.		
Organic peroxides Organic peroxides may contribute to fire, explosion or chemical decomposition.		 or 
Corrosives Products with these symbols are corrosive and can cause severe skin burns and eye damage. They may also be corrosive to metals.		
Gases under pressure Products with these symbols are products where gas is kept under pressure. These products may explode when heated. If they are refrigerated gases they may cause cryogenic burns or injuries. Even normally safe gases can be dangerous when pressurised.		 or 

TABLE 1: Physical hazards

Health hazards

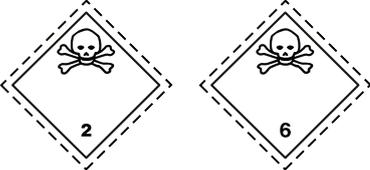
TYPE OF HAZARD	GHS SYMBOL	TRANSPORT OF DANGEROUS GOODS SYMBOLS
<p>Acute toxicity</p> <p>Products with these symbols are acutely toxic. If you see these symbols on the label you need to be aware that you are handling very dangerous products that could cause death if they come into contact with skin or you inhale or ingest them.</p>		<p>Acutely toxic gas Toxic</p> 
<p>Less severe acute health hazards</p> <p>Products with this symbol may cause one or more of the following:</p> <ul style="list-style-type: none"> - skin sensitisation, skin and eye irritation - respiratory irritation, or - drowsiness or dizziness. 		No dangerous goods symbols
<p>Chronic (long-term) health hazards</p> <p>Products with this symbol can cause chronic health issues if people are exposed to the product. These products can:</p> <ul style="list-style-type: none"> - cause cancer - cause mutations - affect fertility - cause damage to an unborn child, and - cause allergies, asthma or breathing difficulties when inhaled. <p>They can also be respiratory sensitisers.</p>		No dangerous goods symbols

TABLE 2: Health hazards

Environmental hazards

TYPE OF HAZARD	GHS SYMBOL	TRANSPORT OF DANGEROUS GOODS SYMBOLS
<p>Environmental hazard</p> <p>Products with this symbol are toxic to the environment (ecotoxic).</p>		

TABLE 3: Environmental hazards

Signal words

You may also see signal words on the label such as **DANGER** and **WARNING**. **DANGER** is used for the most dangerous substances, while **WARNING** is used for less dangerous substances. Products imported from Australia might use the signal words **CAUTION**, **POISON** or **DANGEROUS POISON**. **CAUTION** is used for the least dangerous products while **DANGEROUS POISON** is used for the most dangerous substances.

Hazard statements

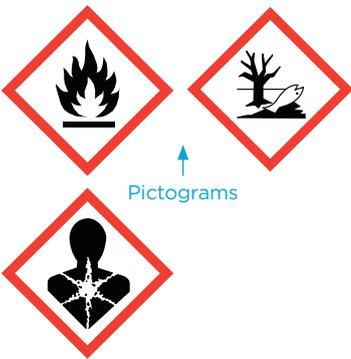
Hazard statements may also be on the label. These statements alert you to the harm that the product can cause for example, **MAY CAUSE MILD SKIN IRRITATION**.

Precautionary statements

Precautionary statements are phrases on the label that describe the recommended measures that should be taken to minimise or prevent adverse effects resulting from exposures to a hazardous product, or from improper storage or handling of a hazardous product, for example, **KEEP OUT OF REACH OF CHILDREN**, or, **USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA**.

The GHS label below shows some of the label features mentioned above.

Mineral Turpentine



Pictograms

DANGER ← Signal word

KEEP OUT OF REACH OF CHILDREN

Flammable liquid and vapour
May be fatal if swallowed and enters airways
Causes mild skin irritation
Toxic to aquatic life with long lasting effects

Hazard statements

Precautionary statements

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PREVENTATIVE MEASURES

Read label before use.
Keep away from heat and ignition sources. No smoking.
Keep container tightly closed when not in use. Avoid inhaling vapour, use only with adequate ventilation.
Wear rubber gloves and safety glasses when using or handling this product.

FIRST AID

If skin rash or irritation occurs get medical attention. Remove contaminated clothing and rinse skin with plenty of soap and water.
If swallowed, immediately call Poisons Centre (0800 POISON) or get medical attention.
Do NOT induce vomiting.
If medical advice is needed, have product or label at hand.

EMERGENCY RESPONSE MEASURES

In case of fire use CO₂ dry chemical or foam extinguisher.
Absorb spilled liquid with sand or inert material.

STORAGE

Store locked up, in a well-ventilated place and keep containers cool.

DISPOSAL

Avoid release to the environment. Do not allow to enter drains or waterways.
Dispose of this material and its container to a hazardous or special waste collection point.

Supplier information including emergency phone number

FIGURE 6:
Sample label

Further information

For more information on labelling, see our *Guide to Labelling, Decanting and Repackaging Hazardous Substances in the Workplace*.

4.3 Safety data sheets

You need to have a current SDS for each hazardous substance you use, handle, manufacture or store. You also need to understand its contents.

You must get an SDS from the manufacturer, importer or supplier of a hazardous substance when they first supply you with a substance, including when they supply a substance to your workplace for the first time in the last five years or for the first time after its SDS changes.

If you do not have an SDS for a hazardous substance, ask your supplier to give you one or ask for an updated SDS if your SDS is more than five years old.

Suppliers have a duty to provide a compliant SDS for every substance they supply to your workplace.

Safety data sheets usually include the following 16 headings:

Section 1	Product name and emergency telephone number of the manufacturer/supplier
Section 2	Hazards identification (this is where the classification should be)
Section 3	Composition/information on ingredients
Section 4	First aid measures
Section 5	Firefighting measures
Section 6	Accidental spill/release measures
Section 7	Handling and storage (may include information about information about incompatible substances and materials)
Section 8	Exposure limits and controls and PPE
Section 9	Physical and chemical properties
Section 10	Stability and reactivity (may include information about incompatible substances and materials)
Section 11	Toxicological information (this is where information on health effects can be found)
Section 12	Ecological information (this is where information on environmental effects can be found)
Section 13	Disposal considerations
Section 14	Transport information (this is where the UN class and packing group can be found)
Section 15	Regulatory information this is where (information on controls and the HSNO approval may be found)
Section 16	Other information

TABLE 4:
SDS headings

As the PCBU, you must read the SDS to find out the harm the hazardous substances at your workplace can cause and how you can protect your workers.

You need to explain the hazards of the hazardous substances to the workers who handle them and make sure they know how they can protect themselves.

An SDS can be difficult for people to understand, particularly if they have trouble reading or speak English as a second language, so take the time to explain this information to your workers and do not leave them to read the SDS on their own.

You can give your workers the key safety information in a condensed version (for example, in product safety cards). Check with your supplier if a condensed version of the SDS is available for your hazardous substances.

Your workers and emergency service workers need to know where the SDS or its condensed version is stored and be able to access it quickly in the event of an emergency.

You may not need an SDS for hazardous substances in transit or held (and not opened) as consumer products in a retailer's workplace for supply to other premises, or consumer products in a workplace used in amounts and ways similar to domestic use.

For more information about safety data sheets and condensed versions, see our *Guide to Safety Data Sheets in the Workplace*.

4.4 Signage

Signs are required when you have hazardous substances over certain limits. Use the Calculator to help you work out whether you are required to have signs in place.



Even if you are not required to have signs, it is best practice always to have them as they warn other people at the workplace and emergency services that hazardous substances are present. Emergency services use signs to plan their response and select appropriate PPE.

What to put on the sign

Signs must be made out of a durable material and must provide information about the substances that are present in plain English or in pictograms. Although sign content can vary depending on the substances present and the storage location, the sign below is an example of the key information you may see on a sign:

<ol style="list-style-type: none"> HAZCHEM. The hazardous property (that is, the class) of the substance and the type of hazard (that is, the subclass) of each substance present using pictograms and/or hazard statements. If you have multiple hazardous substance classifications present at your workplace in amounts over the threshold for signage, you need to show multiple hazards on your sign. For more information on classifications, see page 9. To see examples of the pictograms for different substances, see the table on pages 24-26 of this guide. Emergency actions such as 'Call Emergency Services - Dial 111', or for ecotoxic substances, 'In an emergency protect waterways'. For flammable or oxidising substances, precautions such as 'keep away' or 'no smoking', to prevent unintended ignition, combustion, or thermal decomposition. 	<p>The diagram shows a rectangular sign divided into four sections. Section 1 (top) is an orange header with 'HAZCHEM' in black. Section 2 (right) is a white box with black text: 'IN AN EMERGENCY DIAL 111 FIRE POLICE AMBULANCE' and '24hr COMPANY CONTACT XX XXX XXXX'. Section 3 (left) is a red diamond pictogram with a black flame and the number '3' below it. Section 4 (bottom) is a white box with black text: 'FLAMMABLE LIQUIDS AREA NO SMOKING'. Blue arrows point from the numbered list items to these sections.</p>
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FIGURE 7:
What to put on the sign

Example signs for diesel

Diesel has the classifications 3.1D, 6.1E, 6.3B, 6.7B and 9.1B. Only 3.1D and 9.1B trigger the signage requirement. Your sign must state that you have flammable substances on your site if you have more than 10,000L of a 3.1D substance and that you have ecotoxic substances on your site if you have more than 1,000L of a 9.1B substance.

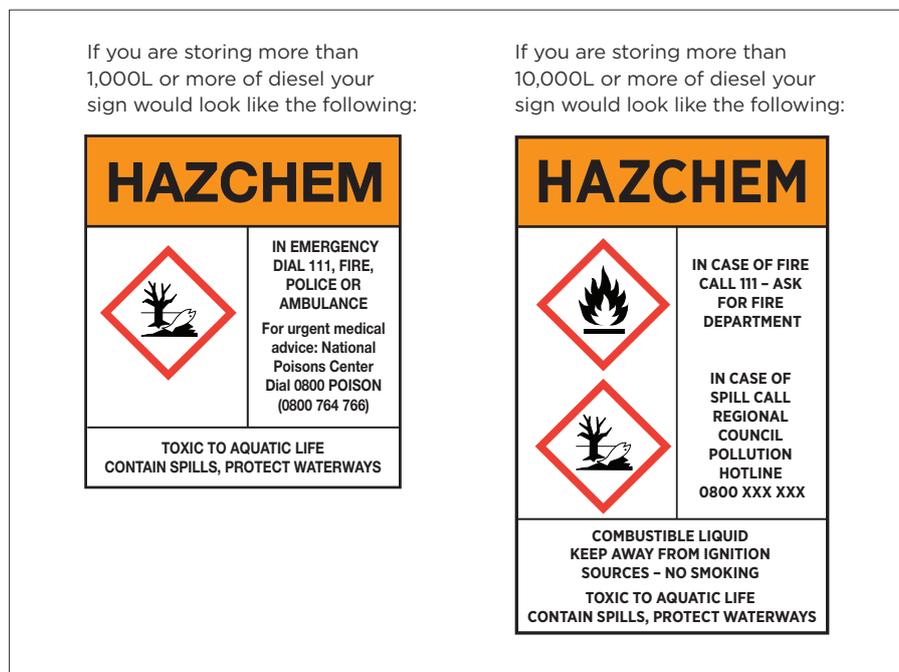


FIGURE 8:
Example signs for diesel

Where to put signs

Signs need to be placed close to where the hazardous substances are stored, but not too close, because people need to know that the danger is there before it is too late. Do not put signs:

- where they may be hidden
- beside doors or gates that cover the sign when the doors or gates are opened
- above doors, or anywhere smoke may conceal the sign.

The location of your signs will depend on what hazardous substances you have and where you store them. See our guide to signs for more detailed information, but as a general rule follow these guidelines:

- When hazardous substances are stored inside a building, place signs at each entrance to the building.
- If hazardous substances are stored in a particular room within a building, place a sign at the entrance to the room.
- You must also place a sign at the entrance to the land where the building is located.
- If the hazardous substances are located outdoors or in a tank, a sign must be positioned immediately next to that area or tank.

To be sure that your signs are correctly placed, take a look outside the building and inside around where hazardous substances are stored (around storage cabinets or dangerous goods stores) and ask 'How will emergency services know about the hazards they will face?'

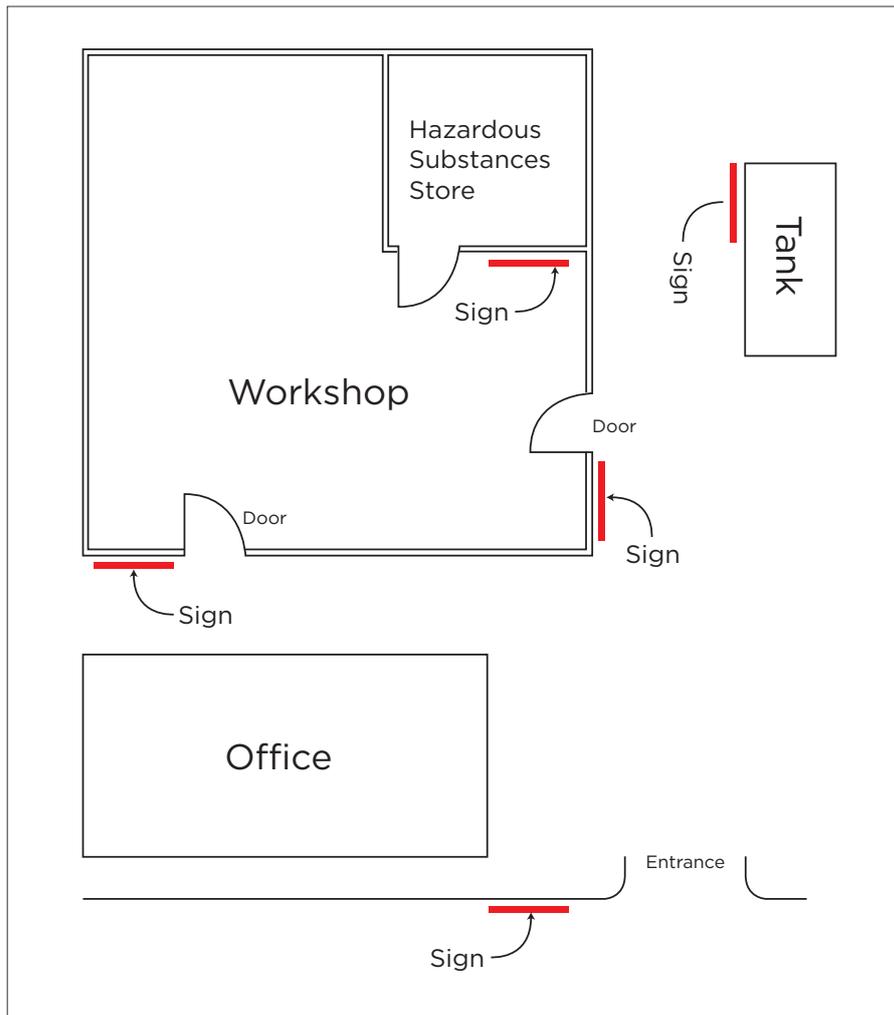


FIGURE 9:
Where signs should be placed at a site

Where to get a sign

Safety equipment suppliers can provide you with the right signs. Check the Yellow Pages or the internet for safety equipment suppliers in your area.

Further information

The information above is a brief introduction to the requirements for signs. For more detailed information, including the requirements for specific substances and locations, see our *Guide to Hazardous Substance Signage*.